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number of sculptors in Bali. Domestic architecture is simply of wood and thatch with secondary walls, undecorated for the most part, and is the concern of carpenters and thatch-workers. Formerly the vassals of the feudal princes built great palaces for them, many of which are still among the finest examples of Balinese architecture, but today the artistic activity of the people goes into the care of their places of worship and other communal buildings, still erected and repaired with great intensity.

In Bali there is no special class of architects, and the sculptors are in charge of designing, directing, and even working themselves in the construction of a temple, assisted by a number of stone- and brick-workers. A master carver should be able to plan beautiful gates, which are the most important examples of Balinese architecture. In Mas, a village of Brahmanas, we saw once an architectural drawing, rather resembling our architectural projects, for a temple gate to be erected in the village. The drawing was made by Ida Bagus Ktut, carver, actor, and musician, member of a whole family of artists; the position and shape of the stones and the carvings on what was to be in sandstone were drawn in great detail on European paper with black ink, with the parts to be made of brick painted red. I believe, however, that this drawing was exceptional, and usually the work is started without a drawn plan. For the making of the great towers for cremation, for example, the master builder simply has the design and the proportions already worked out, as the Balinese say, " in his belly."

The only stone to be found in the island is a soft sandstone, a conglomerate of volcanic ash called *paras*, quarried on the banks of rivers. The stone appears to be softer when freshly taken from the ground and becomes harder with time under favourable conditions. Dr. Stutterheim claims that the stone was protected in old times by a coating of cement, but I had no occasion to verify this and I never found evidence of such cement being used by the present-day Balinese. It is perhaps the softness of this, the only stone in Bali, that is responsible for the over-intricate art of the

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Balinese, making it possible for them to give full vent to their naïve delight in covering all available space with decoration. 324

The stone is cut and shaped with adzes, directly on the spot where it is quarried, and made into blocks of various sizes according to requirements. For the large statues of demons that guard the entrance of temples, the great block of *paras* is roughly shaped to resemble its ultimate form, and when it is considered that enough surplus stone has been removed, it is carried to its destination on stretchers of bamboo — not an easy task, since the quarries are generally at the bottom of deep ravines. I have [483] seen as many as fifteen men struggling up a narrow and slippery path with a great block of stone. The schematic mass of the future devil is placed where it is to remain and is finished on the site.

The blocks of stone for construction are put together without 333 mortar, but it is essential for the stability of the building that 324 the joints should have a perfect fit. This is accomplished by rubbing the two stones together, wearing their surfaces down with great quantities of water. The same process is employed to join baked brick. In this manner the building rises slowly, the workmen protected from the sun by shades made of the woven leaves of the coconut palm and a considerable period of time often elapses before a new temple is finished. The alternate masses of red brick and sandstone are carved last, often leaving the roughly shaped masses of stone for years without decoration.

The stone-carvers follow definite rules when they begin to 531 cover a temple or a palace gate with decoration. For instance, 346 there should be a *karang tjewiri* over the gate, the face of a leering monster with a hanging tongue and long canines. On less important spots the central motif of a pattern is a *karang bintulu*, a curiously popular design consisting of a single bulging eye over a row of upper teeth, the canines of which are developed into fangs, surmounted by the representation of a mountain. To finish a corner there is a special motif, a *karang tjuring*, the upper part of a bird's beak, also provided with a single eye and pointed